

temperature dependent sol-gel reversible transition with less side-effects such as antigenicity and so on.--

Page 4, write the first twenty lines as follows:

--method without surgical operation and have found that a certain class of polyoxyethylene-polyoxypropylene glycols can show a high bio-absorption, a good affinity to a bone morphogenetic protein and temperature dependent sol-gel reversible transition. The present inventors have prepared a bone morphogenetic material by mixing an aqueous polyoxyethylene-polyoxypropylene glycol solution and a bone morphogenetic protein, which is an injectable liquid at a temperature of from 1°C to 30°C at the time of administration and may be gelatinized at around 37°C within 3 minutes after administration. It has been found that ectopic cartilage and bone morphogenesis are accomplished by administering said compositions to mice intramuscularly at the femoral muscle and then retaining a bone morphogenetic protein at the administration sides in vivo, upon which this invention has been completed.

This invention is concerned with a cartilage and bone morphogenetic repairing material which contains a polyoxyethylene-polyoxypropylene glycol and a bone morphogenetic protein.

The polyoxyethylene-polyoxypropylene glycol(s) as used--

Rewrite the paragraph bridging pages 4 and 5 as follows:

--The polyoxyethylene-polyoxypropylene glycol(s) as used herein is a generic name of nonionic surface active agents of a polymer type having less hydrophilic polypropylene glycols as a hydrophobic group and ethylene oxide as a hydrophilic group. It

may be feasible to prepare surface active agents having various properties by changing a molecular weight of the polypropylene glycol and a mixing ratio thereof to the ethylene oxide. The synthesizable polyoxyethylene-polyoxypropylene glycols have a molecular weight of the polypropylene glycol in the range of 900-4,000 and a percent by weight of the ethylene oxide in the total molecule of 5%-90%. For instance, the polyoxyethylene-polyoxypropylene glycol block polymers (ADEKA®) manufactured by Asahi Denka Kogyo K.K. are systematically named according to a molecular weight of polypropylene glycol and a weight ratio of the ethylene oxide to be added and the classification list thereof is shown in Fig. 1.--

Rewrite the first full paragraph of page 5 as follows:

--Industrial utilization of polyoxyethylene-polyoxypropylene glycols includes aperients, ointment bases, artificial blood, coating for tablets, excipients, solubilizers or solubilizing agents for injections and others in the field of pharmaceuticals, in addition to the use as general cleaning agents or antifoamings. In particular, Pluronic F-68 (a molecular weight of polypropylene glycol of 1,750 and an ethylene oxide content of 80%) has a remarkable antihemolytic action and has been marketed in the name of EXOCOPOL® from the Green Cross Corporation as an additive for extracorporeal circulation of blood. It is apparent from the results of toxicity tests using various animals that polyoxyethylene-polyoxypropylene glycols have extremely low toxicity and low irritative property, with no reports on possible

side-effects such as antigenicity and so on (Fragrance Journal, 7, 82-87, 1974). The results of toxicity tests are shown in Table 1.--

Rewrite the first 14 lines of page 7 as follows:

--morphogenetic repairing material wherein a concentration of polyoxyethylene-polyoxypropylene glycols as described above in an aqueous solution is about 10-50%. It is known that the reversible phase transition temperature of polyoxyethylene-polyoxypropylene glycols varies in general depending on the concentration of their prepared aqueous solutions, and the polyoxyethylene-polyoxypropylene glycols within the above-mentioned constituent ranges may gelate at around body temperature, i.e. about 37°C at a concentration of about 10-90% in its aqueous solution. As the most preferable example, there is prepared the polyoxyethylene-polyoxypropylene glycol block polymer aqueous solution of 15-30% concentration having a molecular weight of polypropylene glycol of 3,850 and a ethylene oxide content of 70% (Pluronic F-127).--

Page 9, rewrite the third full paragraph as follows:

--Figs. 3a and 3b are microscopic photographs of the stained tissues of the non-decalcified sections of the femur of the right hind leg of the mouse as obtained by Example 4. Formations of bone matrices and bone matrices together with osteoblasts and of bone marrows can be confirmed by von-Kossa staining (a) and Hematoxylin-Eosin staining (b), respectively.--